

Total Mercury Concentrations in Alaskan Fishes

Update November 2009

Species	N	Total Mercury (ppm wet weight)				Weight (lb)	
		Min.	Median	Max.	Mean ± Std. Dev.	Min.	Max.
Pacific Cod (<i>Gadus macrocephalus</i>)	130	<DL	0.116	0.496	1.142 ± 0.096	1.77	23.3
Pacific Halibut (<i>Hippoglossus stenolepis</i>)	1521	<DL	0.207	1.95	0.300 ± 0.273	4.42	338
Walleye Pollock (<i>Theragra chalcogramma</i>)	185	<DL	<DL	0.389	0.044 ± 0.061	0.66	7.29
Sablefish (<i>Anoplopoma fimbria</i>)	227	<DL	0.103	1.19	0.180 ± 0.196	1.77	16.8
Lingcod (<i>Ophiodon elongatus</i>)	136	0.029	0.430	1.67	0.478 ± 0.341	2.65	59.7
Atka Mackerel (<i>Pleurogrammus monopterygius</i>)	3	0.052	0.072	0.119	0.081 ± 0.035	1.50	1.86
Black Rockfish (<i>Sebastes melanops</i>)	66	<DL	0.099	0.648	0.127 ± 0.100	1.81	8.40
Dusky Rockfish (<i>Sebastes ciliatus</i>)	33	<DL	0.089	0.417	0.145 ± 0.132	0.84	5.53
Pacific Ocean Perch (<i>Sebastes alutus</i>)	78	<DL	0.041	0.262	0.056 ± 0.054	0.46	2.48
Quillback Rockfish (<i>Sebastes maliger</i>)	6	0.183	0.380	0.504	0.355 ± 0.132	2.21	3.98
Rougeye Rockfish (<i>Sebastes aleutianus</i>)	38	0.046	0.132	0.870	0.176 ± 0.163	1.33	4.64
Silvergrey Rockfish (<i>Sebastes brevespinus</i>)	4	<DL	0.109	0.425	0.164 ± 0.180	2.87	7.07
Yelloweye Rockfish (<i>Sebastes ruberrimus</i>)	63	0.139	0.505	1.33	0.583 ± 0.332	1.77	20.6
Yellowtail Rockfish (<i>Sebastes flavidus</i>)	2	0.029	0.038	0.047	NA	1.99	2.43
Yellow Irish Lord (<i>Hemilepidotus jordani</i>)	2	0.371	0.517	0.663	NA	1.77	2.08
Arctic Lamprey (<i>Lampetra camtschatica</i>)	10	<DL	0.028	0.040	0.026 ± 0.010	0.15	0.34
Salmon Shark (<i>Lamna ditropis</i>)	85	0.758	1.37	2.07	1.39 ± 0.289	6' 5.6"	8' 6.4"
Blue Shark (<i>Prionace glauca</i>)	1	1.34	1.34	1.34	NA	44.2	44.2
Spiny Dogfish (<i>Squalus acanthias</i>)	49	0.095	0.834	1.34	0.799 ± 0.251	4.20	8.40
All Salmon (<i>Oncorhynchus spp.</i>)	1029	<DL	0.037	0.159	0.039 ± 0.020	<0.01	32.2
Chinook salmon (<i>Oncorhynchus tshawytscha</i>)	145	<DL	0.055	0.159	0.063 ± 0.028	1.33	32.2
Sockeye Salmon (<i>Oncorhynchus nerka</i>)	221	<DL	0.037	0.082	0.038 ± 0.015	0.88	9.86
Coho Salmon (<i>Oncorhynchus kisutch</i>)	244	<DL	0.037	0.113	0.038 ± 0.015	<0.01	15.5
Chum Salmon (<i>Oncorhynchus keta</i>)	248	<DL	0.039	0.103	0.040 ± 0.014	2.87	13.9
Pink Salmon (<i>Oncorhynchus gorbuscha</i>)	171	<DL	<DL	0.064	0.019 ± 0.010	1.33	7.09
Rainbow Trout (<i>Oncorhynchus mykiss</i>)	34	<DL	0.067	0.330	0.105 ± 0.079	0.24	3.27
Grayling (<i>Thymallus arcticus</i>)	33	0.043	0.088	0.180	0.092 ± 0.032	0.02	1.76
Dolly Varden (<i>Salvelinus malma</i>)	15	<DL	<DL	0.548	0.170 ± 0.172	0.04	4.69
Arctic Char (<i>Salvelinus alpinus</i>)	2	0.230	0.240	0.250	0.240 ± 0.014	1.92	2.03
Lake Trout (<i>Salvelinus namaycush</i>)	16	0.109	0.268	0.740	0.307 ± 0.178	1.56	10.6

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Arctic Cisco (<i>Coregonus autumnalis</i>)	21	<DL	<DL	0.025	0.014 ± 0.004	0.51	1.37
Least Cisco (<i>Coregonus sardinella</i>)	20	0.026	0.038	0.063	0.042 ± 0.011	0.50	0.84
Humpback Whitefish (<i>Coregonus pidschian</i>)	9	0.028	0.036	0.074	0.044 ± 0.017	0.66	1.39
Round Whitefish (<i>Prosopium cylindraceum</i>)	6	0.058	0.085	0.200	0.108 ± 0.053	0.33	0.69
Sheefish (<i>Stenodus leucichthys</i>)	8	0.092	0.120	0.262	0.136 ± 0.057	5.97	17.2
Northern Pike (<i>Esox lucius</i>)	485	<DL	0.347	1.36	0.419 ± 0.291	0.22	18.0
Burbot (<i>Lota lota</i>)	21	<DL	0.226	0.854	0.319 ± 0.280	0.26	6.85
Pacific Oyster (<i>Crassostrea gigas</i>)	16	<DL	<DL	<DL	<DL	NA	NA
Pacific Blue Mussel (<i>Mytilus trossulus</i>)	23	<DL	<DL	0.053	0.018 ± 0.011	NA	NA
Pacific Littleneck Clam (<i>Protothaca staminea</i>)	4	<DL	<DL	<DL	<DL	NA	NA
Pacific Razor Clam (<i>Siliqua patula</i>)	2	<DL	<DL	<DL	<DL	NA	NA
Geoduck Clam (<i>Panopea abrupta</i>)	7	0.027	0.035	0.054	0.041 ± 0.011	NA	NA

Concentrations expressed as parts per million (ppm; mg/kg) wet weight of tissue

Detection Limit (DL) = 0.025 ppm

Total mercury concentrations <DL are assumed to be 0.0125 ppm (one-half the DL) for calculation purposes

NA: not available

not calculated if <3 samples

not calculated if all sample means <DL

Weights for Pacific Halibut are calculated from length, based on formula provided by the International Pacific Halibut Commission

Lengths (feet and inches) are given for Salmon Sharks, since weights were not provided